

## SEQUENCE LISTING

<110> INCYTE GENOMICS, INC.  
 BANDMAN, Olga  
 LU, Dyung Aina M.  
 YUE, Henry  
 TRAN, Bao  
 HILLMAN, Jennifer L.  
 BAUGHN, Mariah R.  
 LAL, Preeti  
 TANG, Y. Tom

<120> ISOMERASE PROTEINS

<130> PF-0730 PCT

<140> To Be Assigned

<141> Herewith

<150> 60/149,388

<151> 1999-08-17

<160> 16

<170> PERL Program

<210> 1

<211> 542

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 011886CD1

<400> 1

Met	Asp	Leu	Gly	Ala	Ile	Thr	Lys	Tyr	Ser	Ala	Leu	His	Ala	Lys
1				5					10					15
Pro	Asn	Gly	Leu	Ile	Leu	Gln	Tyr	Gly	Thr	Ala	Gly	Phe	Arg	Thr
				20					25					30
Lys	Ala	Glu	His	Leu	Asp	His	Val	Met	Phe	Arg	Met	Gly	Leu	Leu
				35					40					45
Ala	Val	Leu	Arg	Ser	Lys	Gln	Thr	Lys	Ser	Thr	Ile	Gly	Val	Met
				50					55					60
Val	Thr	Ala	Ser	His	Asn	Pro	Glu	Glu	Asp	Asn	Gly	Val	Lys	Leu
				65					70					75
Val	Asp	Pro	Leu	Gly	Glu	Met	Leu	Ala	Pro	Ser	Trp	Glu	Glu	His
				80					85					90
Ala	Thr	Cys	Leu	Ala	Asn	Ala	Glu	Glu	Gln	Asp	Met	Gln	Arg	Val
				95					100					105
Leu	Ile	Asp	Ile	Ser	Glu	Lys	Glu	Ala	Val	Asn	Leu	Gln	Gln	Asp
				110					115					120
Ala	Phe	Val	Val	Ile	Gly	Arg	Asp	Thr	Arg	Pro	Ser	Ser	Glu	Lys
				125					130					135
Leu	Ser	Gln	Ser	Val	Ile	Asp	Gly	Val	Thr	Val	Leu	Gly	Gly	Gln
				140					145					150
Phe	His	Asp	Tyr	Gly	Leu	Leu	Thr	Thr	Pro	Gln	Leu	His	Tyr	Met
				155					160					165
Val	Tyr	Cys	Arg	Asn	Thr	Gly	Gly	Arg	Tyr	Gly	Lys	Ala	Thr	Ile
				170					175					180
Glu	Gly	Tyr	Tyr	Gln	Lys	Leu	Ser	Lys	Ala	Phe	Val	Glu	Leu	Thr

Lys Gln Ala Ser	185	Cys Ser Gly Asp Glu	190	Tyr Arg Ser Leu Lys	195
200		205		210	
Asp Cys Ala Asn	215	Gly Ile Gly Ala Leu	220	Lys Leu Arg Glu Met	225
230		235		240	
His Tyr Phe Ser	245	Gln Gly Leu Ser Val	250	Gln Leu Phe Asn Asp	255
260		265		270	
Ser Lys Gly Lys	275	Leu Asn His Leu Cys	280	Gly Ala Asp Phe Val	285
290		295		300	
Ser His Gln Lys	305	Pro Pro Gln Gly Met	310	Glu Ile Lys Ser Asn	315
320		325		330	
Arg Cys Cys Ser	335	Phe Asp Gly Asp Ala	340	Asp Arg Ile Val Tyr	345
350		355		360	
Tyr His Asp Ala	365	Asp Gly His Phe His	370	Leu Ile Asp Gly Asp	375
380		385		390	
Ile Ala Thr Leu	395	Ile Ser Ser Phe Leu	400	Lys Glu Leu Leu Val	405
410		415		420	
Ile Gly Glu Ser	425	Leu Asn Ile Gly Val	430	Val Gln Thr Ala Tyr	435
440		445		450	
Asn Gly Ser Ser	455	Thr Arg Tyr Leu Glu	460	Glu Val Met Lys Val	465
470		475		480	
Val Tyr Cys Thr	485	Lys Thr Gly Val Lys	490	His Leu His His Lys	495
500		505		510	
Gln Glu Phe Asp	515	Ile Gly Val Tyr Phe	520	Glu Ala Asn Gly His	525
530		535		540	
Thr Ala Leu Phe		Ser Thr Ala Val Glu		Met Lys Ile Lys Gln	
Ala Glu Gln Leu		Glu Asp Lys Lys Arg		Lys Ala Ala Lys Met	
Glu Asn Ile Ile		Asp Leu Phe Asn Gln		Ala Ala Gly Asp Ala	
Ser Asp Met Leu		Val Ile Glu Ala Ile		Leu Ala Leu Lys Gly	
Thr Val Gln Gln		Trp Asp Ala Leu Tyr		Thr Asp Leu Pro Asn	
Gln Leu Lys Val		Gln Val Ala Asp Arg		Arg Val Ile Ser Thr	
Asp Ala Glu Arg		Gln Ala Val Thr Pro		Pro Gly Leu Gln Glu	
Ile Asn Asp Leu		Val Lys Lys Tyr Lys		Leu Ser Arg Ala Phe	
Arg Pro Ser Gly		Thr Glu Asp Val Val		Arg Val Tyr Ala Glu	
Ala Val Phe Gln		Ser Ala Asp His Leu		Ala His Glu Val Ser	
Gly Phe		Leu Ala Gly Gly Ile		Gly Glu Arg Pro Gln	

&lt;210&gt; 2

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1863189CD1

&lt;400&gt; 2

Met Gln Arg Pro Gly Pro Phe Ser Thr Leu Tyr Gly Arg Val Leu

1	5	10	15
Ala Pro Leu Pro Gly	Arg Ala Gly Gly	Ala Ala Ser Gly Gly	Gly Gly
20	25	30	
Gly Asn Ser Trp Asp	Leu Pro Gly Ser His	Val Arg Leu Pro Gly	
35	40	45	
Arg Ala Gln Ser Gly	Thr Arg Gly Gly	Ala Gly Asn Thr Ser	Thr
50	55	60	
Ser Cys Gly Asp Ser	Asn Ser Ile Cys Pro	Ala Pro Ser Thr Met	
65	70	75	
Ser Lys Ala Glu Glu	Ala Lys Lys Leu Ala	Gly Arg Ala Ala Val	
80	85	90	
Glu Asn His Val Arg	Asn Asn Gln Val Leu	Gly Ile Gly Ser Gly	
95	100	105	
Ser Thr Ile Val His	Ala Val Gln Arg Ile	Ala Glu Arg Val Lys	
110	115	120	
Gln Glu Asn Leu Asn	Leu Val Cys Ile Pro	Thr Ser Phe Gln Ala	
125	130	135	
Arg Gln Leu Ile Leu	Gln Tyr Gly Leu Thr	Leu Ser Asp Leu Asp	
140	145	150	
Arg His Pro Glu Ile	Asp Leu Ala Ile Asp	Gly Ala Asp Glu Val	
155	160	165	
Asp Ala Asp Leu Asn	Leu Ile Lys Gly Gly	Gly Gly Cys Leu Thr	
170	175	180	
Gln Glu Lys Ile Val	Ala Gly Tyr Ala Ser	Arg Phe Ile Val Ile	
185	190	195	
Ala Asp Phe Arg Lys	Asp Ser Lys Asn Leu	Gly Asp Gln Trp His	
200	205	210	
Lys Gly Ile Pro Ile	Glu Val Ile Pro Met	Ala Tyr Val Pro Val	
215	220	225	
Ser Arg Ala Val Ser	Gln Lys Phe Gly Gly	Val Val Glu Leu Arg	
230	235	240	
Met Ala Val Asn Lys	Ala Gly Pro Val Val	Thr Asp Asn Gly Asn	
245	250	255	
Phe Ile Leu Asp Trp	Lys Phe Asp Arg Val	His Lys Trp Ser Glu	
260	265	270	
Val Asn Thr Ala Ile	Lys Met Ile Pro Gly	Val Val Asp Thr Gly	
275	280	285	
Leu Phe Ile Asn Met	Ala Glu Arg Val Tyr	Phe Gly Met Gln Asp	
290	295	300	
Gly Ser Val Asn Met	Arg Glu Lys Pro Phe	Cys	
305	310		

&lt;210&gt; 3

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2088868CD1

&lt;400&gt; 3

Met Glu Ala Ala Pro	Ser Arg Phe Met Phe	Leu Leu Phe Leu Leu
1	5	10
Thr Cys Glu Leu Ala	Glu Val Ala Ala	Glu Val Glu Lys Ser
20	25	30
Ser Asp Gly Pro Gly	Ala Ala Gln Glu Pro	Thr Trp Leu Thr Asp
35	40	45
Val Pro Ala Ala Met	Glu Phe Ile Ala Ala	Thr Glu Val Ala Val
50	55	60

Ile	Gly	Phe	Phe	Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	
				65					70					75	
His	Ser	Met	Val	Gln	Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	
				80					85					90	
Thr	Asp	Ser	Glu	Val	Leu	Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	
				95					100					105	
Ile	Cys	Leu	Phe	Arg	Leu	Val	Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	
				110					115					120	
Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp	Ala	Thr	Lys	Leu	Ser	Arg	Phe	
				125					130					135	
Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val	Thr	Glu	Tyr	Asn	Pro	Val	
				140					145					150	
Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile	Gln	Ile	His	Leu	Leu	
				155					160					165	
Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	Glu	Asn	Met	His	
				170					175					180	
Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys	Ile	Leu	Phe	
				185					190					195	
Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val	Ile	Ser	
				200					205					210	
Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile	Tyr	
				215					220					225	
Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val	
				230					235					240	
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	
				245					250					255	
Lys	Leu	Leu	Lys	Glu	Asn	Arg	Glu	Ser	Glu	Gly	Lys	Thr	Pro	Lys	
				260					265					270	
Val	Glu	Leu													

&lt;210&gt; 4

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2481256CD1

&lt;400&gt; 4

Met	Ala	Ser	Gly	Cys	Lys	Ile	Gly	Pro	Ser	Ile	Leu	Asn	Ser	Asp	
1				5					10					15	
Leu	Ala	Asn	Leu	Gly	Ala	Glu	Cys	Leu	Arg	Met	Leu	Asp	Ser	Gly	
				20					25					30	
Ala	Asp	Tyr	Leu	His	Leu	Asp	Val	Met	Asp	Gly	His	Phe	Val	Pro	
				35					40					45	
Asn	Ile	Thr	Phe	Gly	His	Pro	Val	Val	Glu	Ser	Leu	Arg	Lys	Gln	
				50					55					60	
Leu	Gly	Gln	Asp	Pro	Phe	Phe	Asp	Met	His	Met	Met	Val	Ser	Lys	
				65					70					75	
Pro	Glu	Gln	Trp	Val	Lys	Pro	Met	Ala	Val	Ala	Gly	Ala	Asn	Gln	
				80					85					90	
Tyr	Thr	Phe	His	Leu	Glu	Ala	Thr	Glu	Asn	Pro	Gly	Ala	Leu	Ile	
				95					100					105	
Lys	Asp	Ile	Arg	Glu	Asn	Gly	Met	Lys	Val	Gly	Leu	Ala	Ile	Lys	
				110					115					120	
Pro	Gly	Thr	Ser	Val	Glu	Tyr	Leu	Ala	Pro	Trp	Ala	Asn	Gln	Ile	
				125					130					135	
Asp	Met	Ala	Leu	Val	Met	Thr	Val	Glu	Pro	Gly	Phe	Gly	Gly	Gln	
				140					145					150	

Lys	Phe	Met	Glu	Asp	Met	Met	Pro	Lys	Val	His	Trp	Leu	Arg	Thr	
				155					160					165	
Gln	Phe	Pro	Ser	Leu	Asp	Ile	Glu	Val	Asp	Gly	Gly	Val	Gly	Pro	
				170					175					180	
Asp	Thr	Val	His	Lys	Cys	Ala	Glu	Ala	Gly	Ala	Asn	Met	Ile	Val	
				185					190					195	
Ser	Gly	Ser	Ala	Ile	Met	Arg	Ser	Glu	Asp	Pro	Arg	Ser	Val	Ile	
				200					205					210	
Asn	Leu	Leu	Arg	Asn	Val	Cys	Ser	Glu	Ala	Ala	Gln	Lys	Arg	Ser	
				215					220					225	
Leu	Asp	Arg													

&lt;210&gt; 5

&lt;211&gt; 793

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2505257CD1

&lt;400&gt; 5

Met	Gly	Val	Trp	Leu	Asn	Lys	Asp	Asp	Asp	Ile	Arg	Asp	Leu	Lys	
1				5					10					15	
Arg	Ile	Ile	Leu	Cys	Phe	Leu	Ile	Val	Tyr	Met	Ala	Ile	Leu	Val	
				20					25					30	
Gly	Thr	Asp	Gln	Asp	Phe	Tyr	Ser	Leu	Leu	Gly	Val	Ser	Lys	Thr	
				35					40					45	
Ala	Ser	Ser	Arg	Glu	Ile	Arg	Gln	Ala	Phe	Lys	Lys	Leu	Ala	Leu	
				50					55					60	
Lys	Leu	His	Pro	Asp	Lys	Asn	Pro	Asn	Asn	Pro	Asn	Ala	His	Gly	
				65					70					75	
Asn	Phe	Leu	Lys	Ile	Asn	Arg	Ala	Tyr	Glu	Val	Leu	Lys	Asp	Glu	
				80					85					90	
Asp	Leu	Arg	Lys	Lys	Tyr	Asp	Lys	Tyr	Gly	Glu	Lys	Gly	Leu	Glu	
				95					100					105	
Asp	Asn	Gln	Gly	Gly	Gln	Tyr	Glu	Ser	Trp	Asn	Tyr	Tyr	Arg	Tyr	
				110					115					120	
Asp	Phe	Gly	Ile	Tyr	Asp	Asp	Asp	Pro	Glu	Ile	Ile	Thr	Leu	Glu	
				125					130					135	
Arg	Arg	Glu	Phe	Asp	Ala	Ala	Val	Asn	Ser	Gly	Glu	Leu	Trp	Phe	
				140					145					150	
Val	Asn	Phe	Tyr	Ser	Pro	Gly	Cys	Ser	His	Cys	His	Asp	Leu	Ala	
				155					160					165	
Pro	Thr	Trp	Arg	Asp	Phe	Ala	Lys	Glu	Val	Asp	Gly	Leu	Leu	Arg	
				170					175					180	
Ile	Gly	Ala	Val	Asn	Cys	Gly	Asp	Asp	Arg	Met	Leu	Cys	Arg	Met	
				185					190					195	
Lys	Gly	Val	Asn	Ser	Tyr	Pro	Ser	Leu	Phe	Ile	Phe	Arg	Ser	Gly	
				200					205					210	
Met	Ala	Pro	Val	Lys	Tyr	His	Gly	Asp	Arg	Ser	Lys	Glu	Ser	Leu	
				215					220					225	
Val	Ser	Phe	Ala	Met	Gln	His	Val	Arg	Ser	Thr	Val	Thr	Glu	Leu	
				230					235					240	
Trp	Thr	Gly	Asn	Phe	Val	Asn	Ser	Ile	Gln	Thr	Ala	Phe	Ala	Ala	
				245					250					255	
Gly	Ile	Gly	Trp	Leu	Ile	Thr	Phe	Cys	Ser	Lys	Gly	Gly	Asp	Cys	
				260					265					270	
Leu	Thr	Ser	Gln	Thr	Arg	Leu	Arg	Leu	Ser	Gly	Met	Leu	Asp	Gly	
				275					280					285	

Leu	Val	Asn	Val	Gly	Trp	Met	Asp	Cys	Ala	Thr	Gln	Asp	Asn	Leu
				290					295					300
Cys	Lys	Ser	Leu	Asp	Ile	Thr	Thr	Ser	Thr	Thr	Ala	Tyr	Phe	Pro
				305					310					315
Pro	Gly	Ala	Thr	Leu	Asn	Asn	Lys	Glu	Lys	Asn	Ser	Ile	Leu	Phe
				320					325					330
Leu	Asn	Ser	Leu	Asp	Ala	Lys	Glu	Ile	Tyr	Leu	Glu	Val	Ile	His
				335					340					345
Asn	Leu	Pro	Asp	Phe	Glu	Leu	Leu	Ser	Ala	Asn	Thr	Leu	Glu	Asp
				350					355					360
Arg	Leu	Ala	His	His	Arg	Trp	Leu	Leu	Phe	Phe	His	Phe	Gly	Lys
				365					370					375
Asn	Glu	Asn	Ser	Asn	Asp	Pro	Glu	Leu	Lys	Lys	Leu	Lys	Thr	Leu
				380					385					390
Leu	Lys	Asn	Asp	His	Ile	Gln	Val	Gly	Arg	Phe	Asp	Cys	Ser	Ser
				395					400					405
Ala	Pro	Asp	Ile	Cys	Ser	Asn	Leu	Tyr	Val	Phe	Gln	Pro	Ser	Leu
				410					415					420
Ala	Val	Phe	Lys	Gly	Gln	Gly	Thr	Lys	Glu	Tyr	Glu	Ile	His	His
				425					430					435
Gly	Lys	Lys	Ile	Leu	Tyr	Asp	Ile	Leu	Ala	Phe	Ala	Lys	Glu	Ser
				440					445					450
Val	Asn	Ser	His	Val	Thr	Thr	Leu	Gly	Pro	Gln	Asn	Phe	Pro	Ala
				455					460					465
Asn	Asp	Lys	Glu	Pro	Trp	Leu	Val	Asp	Phe	Phe	Ala	Pro	Trp	Cys
				470					475					480
Pro	Pro	Cys	Arg	Ala	Leu	Leu	Pro	Glu	Leu	Arg	Arg	Ala	Ser	Asn
				485					490					495
Leu	Leu	Tyr	Gly	Gln	Leu	Lys	Phe	Gly	Thr	Leu	Asp	Cys	Thr	Val
				500					505					510
His	Glu	Gly	Leu	Cys	Asn	Met	Tyr	Asn	Ile	Gln	Ala	Tyr	Pro	Thr
				515					520					525
Thr	Val	Val	Phe	Asn	Gln	Ser	Asn	Ile	His	Glu	Tyr	Glu	Gly	His
				530					535					540
His	Ser	Ala	Glu	Gln	Ile	Leu	Glu	Phe	Ile	Glu	Asp	Leu	Met	Asn
				545					550					555
Pro	Ser	Val	Val	Ser	Leu	Thr	Pro	Thr	Thr	Phe	Asn	Glu	Leu	Val
				560					565					570
Thr	Gln	Arg	Lys	His	Asn	Glu	Val	Trp	Met	Val	Asp	Phe	Tyr	Ser
				575					580					585
Pro	Trp	Cys	His	Pro	Cys	Gln	Val	Leu	Met	Pro	Glu	Trp	Lys	Arg
				590					595					600
Met	Ala	Arg	Thr	Leu	Thr	Gly	Leu	Ile	Asn	Val	Gly	Ser	Ile	Asp
				605					610					615
Cys	Gln	Gln	Tyr	His	Ser	Phe	Cys	Ala	Gln	Glu	Asn	Val	Gln	Arg
				620					625					630
Tyr	Pro	Glu	Ile	Arg	Phe	Phe	Pro	Pro	Lys	Ser	Asn	Lys	Ala	Tyr
				635					640					645
Gln	Tyr	His	Ser	Tyr	Asn	Gly	Trp	Asn	Arg	Asp	Ala	Tyr	Ser	Leu
				650					655					660
Arg	Ile	Trp	Gly	Leu	Gly	Phe	Leu	Pro	Gln	Val	Ser	Thr	Asp	Leu
				665					670					675
Thr	Pro	Gln	Thr	Phe	Ser	Glu	Lys	Val	Leu	Gln	Gly	Lys	Asn	His
				680					685					690
Trp	Val	Ile	Asp	Phe	Tyr	Ala	Pro	Trp	Cys	Gly	Pro	Cys	Gln	Asn
				695					700					705
Phe	Ala	Pro	Glu	Phe	Glu	Leu	Leu	Ala	Arg	Met	Ile	Lys	Gly	Lys
				710					715					720
Val	Lys	Ala	Gly	Lys	Val	Asp	Cys	Gln	Ala	Tyr	Ala	Gln	Thr	Cys
				725					730					735
Gln	Lys	Ala	Gly	Ile	Arg	Ala	Tyr	Pro	Thr	Val	Lys	Phe	Tyr	Phe
				740					745					750
Tyr	Glu	Arg	Ala	Lys	Arg	Asn	Phe	Gln	Glu	Glu	Gln	Ile	Asn	Thr

	755		760		765
Arg Asp Ala Lys	Ala Ile Ala Ala Leu	Ile Ser Glu Lys Leu	Glu		
	770		775		780
Thr Leu Arg Asn	Gln Gly Lys Arg Asn	Lys Asp Glu Leu			
	785		790		

<210> 6  
 <211> 492  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <223> Incyte ID No: 3325534CD1

<400> 6

Met Ala Val Leu Leu	Glu Thr Thr Leu Gly	Asp Val Val Ile Asp	
1	5	10	15
Leu Tyr Thr Glu Glu	Arg Pro Arg Ala Cys	Leu Asn Phe Leu Lys	
	20	25	30
Leu Cys Lys Ile Lys	Tyr Tyr Asn Tyr Cys	Leu Ile His Asn Val	
	35	40	45
Gln Arg Asp Phe Ile	Ile Gln Thr Gly Asp	Pro Thr Gly Thr Gly	
	50	55	60
Arg Gly Gly Glu Ser	Ile Phe Gly Gln Leu	Tyr Gly Asp Gln Ala	
	65	70	75
Ser Phe Phe Glu Ala	Glu Lys Val Pro Arg	Ile Lys His Lys Lys	
	80	85	90
Lys Gly Thr Val Ser	Met Val Asn Asn Gly	Ser Asp Gln His Gly	
	95	100	105
Ser Gln Phe Leu Ile	Thr Thr Gly Glu Asn	Leu Asp Tyr Leu Asp	
	110	115	120
Gly Val His Thr Val	Phe Gly Glu Val Thr	Glu Gly Met Asp Ile	
	125	130	135
Ile Lys Lys Ile Asn	Glu Thr Phe Val Asp	Lys Asp Phe Val Pro	
	140	145	150
Tyr Gln Asp Ile Arg	Ile Asn His Thr Val	Ile Leu Asp Asp Pro	
	155	160	165
Phe Asp Asp Pro Pro	Asp Leu Leu Ile Pro	Asp Arg Ser Pro Glu	
	170	175	180
Pro Thr Arg Glu Gln	Leu Asp Ser Gly Arg	Ile Gly Ala Asp Glu	
	185	190	195
Glu Ile Asp Asp Phe	Lys Gly Arg Ser Ala	Glu Glu Val Glu Glu	
	200	205	210
Ile Lys Ala Glu Lys	Glu Ala Lys Thr Gln	Ala Ile Leu Leu Glu	
	215	220	225
Met Val Gly Asp Leu	Pro Asp Ala Asp Ile	Lys Pro Pro Glu Asn	
	230	235	240
Val Leu Phe Val Cys	Lys Leu Asn Pro Val	Thr Thr Asp Glu Asp	
	245	250	255
Leu Glu Ile Ile Phe	Ser Arg Phe Gly Pro	Ile Arg Ser Cys Glu	
	260	265	270
Val Ile Arg Asp Trp	Lys Thr Gly Glu Ser	Leu Cys Tyr Ala Phe	
	275	280	285
Ile Glu Phe Glu Lys	Glu Glu Asp Cys Glu	Lys Ala Phe Phe Lys	
	290	295	300
Met Asp Asn Val Leu	Ile Asp Asp Arg Arg	Ile His Val Asp Phe	
	305	310	315
Ser Gln Ser Val Ala	Lys Val Lys Trp Lys	Gly Lys Gly Gly Lys	
	320	325	330

```

Tyr Thr Lys Ser Asp Phe Lys Glu Tyr Glu Lys Glu Gln Asp Lys
335 340 345
Pro Pro Asn Leu Val Leu Lys Asp Lys Val Lys Pro Lys Gln Asp
350 355 360
Thr Lys Tyr Asp Leu Ile Leu Asp Glu Gln Ala Glu Asp Ser Lys
365 370 375
Ser Ser His Ser His Thr Ser Lys Lys His Lys Lys Lys Thr His
380 385 390
His Cys Ser Glu Glu Lys Glu Asp Glu Asp Tyr Met Pro Ile Lys
395 400 405
Asn Thr Asn Gln Asp Ile Tyr Arg Glu Met Gly Phe Gly His Tyr
410 415 420
Glu Glu Glu Glu Ser Cys Trp Glu Lys Gln Lys Ser Glu Lys Arg
425 430 435
Asp Arg Thr Gln Asn Arg Ser Arg Ser Arg Ser Arg Glu Arg Asp
440 445 450
Gly His Tyr Ser Asn Ser His Lys Ser Lys Tyr Gln Thr Asp Leu
455 460 465
Tyr Glu Arg Glu Arg Ser Lys Lys Arg Asp Arg Ser Arg Ser Pro
470 475 480
Lys Lys Ser Lys Asp Lys Glu Lys Ser Lys Tyr Arg
485 490

```

&lt;210&gt; 7

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 3817050CD1

&lt;400&gt; 7

```

Met Val Ile Pro Thr Val Pro Phe Asn Ile Thr Ile Asn Ser Lys
1 5 10 15
Pro Leu Gly His Ile Ser Phe Gln Leu Phe Ala Asp Lys Phe Pro
20 25 30
Lys Thr Gly Glu Asn Phe His Thr Leu Asn Asn Lys Asp Lys Gly
35 40 45
Phe Gly Ser Cys Phe His Arg Ile Ile Pro Glu Phe Ile Cys Gln
50 55 60
Gly Asp Asp Phe Thr Pro His Asn Gly Ile Gly Gly Lys Ser Ile
65 70 75
Tyr Gly Asp Lys Phe Asp Asp Lys Asn Phe Ile Val Lys His Thr
80 85 90
Gly Leu Gly Ile Leu Ser Met Ala Asn Ala Ala Pro Lys Thr Asn
95 100 105
Glu Ser Gln Phe Phe Ile Cys Thr Ala Met Ala Lys Trp Trp Asp
110 115 120
Gly Lys His Val Ile Phe Gly Arg Val Lys Glu Gly Met Asn Ile
125 130 135
Val Glu Ala Met Glu Cys Phe Gly Ser Arg Asn Gly Lys Thr Ser
140 145 150
Lys Ile Ala Ile Ala Asn Cys Arg Gln Leu
155 160

```

&lt;210&gt; 8



<211> 744  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <223> Incyte ID No: 5324378CD1

<400> 8  
 Met Gln Lys Thr Glu Thr Leu Leu Leu Phe Ser Cys Asn Ile Ser  
 1 5 10 15  
 Val Ser Ser Glu Pro Gly Val Leu Gly Tyr Phe Glu Phe Ser Gly  
 20 25 30  
 Ser Pro Gln Pro Pro Gly Tyr Leu Thr Phe Phe Thr Ser Ala Leu  
 35 40 45  
 His Ser Leu Lys Lys Asp Tyr Leu Gly Thr Val Arg Phe Gly Val  
 50 55 60  
 Ile Thr Asn Lys His Leu Ala Lys Leu Val Ser Leu Val His Ser  
 65 70 75  
 Gly Ser Val Tyr Leu His Arg His Phe Asn Thr Ser Leu Val Phe  
 80 85 90  
 Pro Arg Glu Val Leu Asn Tyr Thr Ala Glu Asn Ile Cys Lys Trp  
 95 100 105  
 Ala Leu Glu Asn Gln Glu Thr Leu Phe Arg Trp Leu Arg Pro His  
 110 115 120  
 Gly Gly Lys Ser Leu Leu Leu Asn Asn Glu Leu Lys Lys Gly Pro  
 125 130 135  
 Ala Leu Phe Leu Phe Ile Pro Phe Asn Pro Leu Ala Glu Ser His  
 140 145 150  
 Pro Leu Ile Asp Glu Ile Thr Glu Val Ala Leu Glu Tyr Asn Asn  
 155 160 165  
 Cys His Gly Asp Gln Val Val Glu Arg Leu Leu Gln His Leu Arg  
 170 175 180  
 Arg Val Asp Ala Pro Val Leu Glu Ser Leu Ala Leu Glu Val Pro  
 185 190 195  
 Ala Gln Leu Pro Asp Pro Pro Thr Ile Thr Ala Ser Pro Cys Cys  
 200 205 210  
 Asn Thr Val Val Leu Pro Gln Trp His Ser Phe Ser Arg Thr His  
 215 220 225  
 Asn Val Cys Glu Leu Cys Val Asn Gln Thr Ser Gly Gly Met Lys  
 230 235 240  
 Pro Ser Ser Val Ser Val Pro Gln Cys Ser Phe Phe Glu Met Ala  
 245 250 255  
 Ala Ala Leu Asp Ser Phe Tyr Leu Lys Glu Gln Thr Phe Tyr His  
 260 265 270  
 Val Ala Ser Asp Ser Ile Glu Cys Ser Asn Phe Leu Thr Ser Tyr  
 275 280 285  
 Ser Pro Phe Ser Tyr Tyr Thr Ala Cys Cys Arg Thr Ile Ser Arg  
 290 295 300  
 Gly Val Ser Gly Phe Ile Asp Ser Glu Gln Gly Val Phe Glu Ala  
 305 310 315  
 Pro Thr Val Ala Phe Ser Ser Leu Glu Lys Lys Cys Glu Val Asp  
 320 325 330  
 Ala Pro Ser Ser Val Pro His Ile Glu Glu Asn Arg Tyr Leu Phe  
 335 340 345  
 Pro Glu Val Asp Met Thr Ser Thr Asn Phe Thr Gly Leu Ser Cys  
 350 355 360  
 Arg Thr Asn Lys Thr Leu Asn Ile Tyr Leu Leu Asp Ser Asn Leu  
 365 370 375  
 Phe Trp Leu Tyr Ala Glu Arg Leu Gly Ala Pro Ser Ser Thr Gln  
 380 385 390  
 Val Lys Glu Phe Ala Ala Ile Val Asp Val Lys Glu Glu Ser His  
 395 400 405

Tyr	Ile	Leu	Asp	Pro	Lys	Gln	Ala	Leu	Met	Lys	Leu	Thr	Leu	Glu	
				410					415					420	
Ser	Phe	Ile	Gln	Asn	Phe	Ser	Val	Leu	Tyr	Ser	Pro	Leu	Lys	Arg	
				425					430					435	
His	Leu	Ile	Gly	Ser	Gly	Ser	Ala	Gln	Phe	Pro	Ser	Gln	His	Leu	
				440					445					450	
Ile	Thr	Glu	Val	Thr	Thr	Asp	Thr	Phe	Trp	Glu	Val	Val	Leu	Gln	
				455					460					465	
Lys	Gln	Asp	Val	Leu	Leu	Leu	Tyr	Tyr	Ala	Pro	Trp	Cys	Gly	Phe	
				470					475					480	
Cys	Pro	Ser	Leu	Asn	His	Ile	Phe	Ile	Gln	Leu	Ala	Arg	Asn	Leu	
				485					490					495	
Pro	Met	Asp	Thr	Phe	Thr	Val	Ala	Arg	Ile	Asp	Val	Ser	Gln	Asn	
				500					505					510	
Asp	Leu	Pro	Trp	Glu	Phe	Met	Val	Asp	Arg	Leu	Pro	Thr	Val	Leu	
				515					520					525	
Phe	Phe	Pro	Cys	Asn	Arg	Lys	Asp	Leu	Ser	Val	Lys	Tyr	Pro	Glu	
				530					535					540	
Asp	Val	Pro	Ile	Thr	Leu	Pro	Asn	Leu	Leu	Arg	Phe	Ile	Leu	His	
				545					550					555	
His	Ser	Asp	Pro	Ala	Ser	Ser	Pro	Gln	Asn	Val	Ala	Asn	Ser	Pro	
				560					565					570	
Thr	Lys	Glu	Cys	Leu	Gln	Ser	Glu	Ala	Val	Leu	Gln	Arg	Gly	His	
				575					580					585	
Ile	Ser	His	Leu	Glu	Arg	Glu	Ile	Gln	Lys	Leu	Arg	Ala	Glu	Ile	
				590					595					600	
Ser	Ser	Leu	Gln	Arg	Ala	Gln	Val	Gln	Val	Glu	Ser	Gln	Leu	Ser	
				605					610					615	
Ser	Ala	Arg	Arg	Asp	Glu	His	Arg	Leu	Arg	Gln	Gln	Gln	Arg	Ala	
				620					625					630	
Leu	Glu	Glu	Gln	His	Ser	Leu	Leu	His	Ala	His	Ser	Glu	Gln	Leu	
				635					640					645	
Gln	Ala	Leu	Tyr	Glu	Gln	Lys	Thr	Arg	Glu	Leu	Gln	Glu	Leu	Ala	
				650					655					660	
Arg	Lys	Leu	Gln	Glu	Leu	Ala	Asp	Ala	Ser	Glu	Asn	Leu	Leu	Thr	
				665					670					675	
Glu	Asn	Thr	Trp	Leu	Lys	Ile	Leu	Val	Ala	Thr	Met	Glu	Arg	Lys	
				680					685					690	
Leu	Glu	Gly	Arg	Asp	Gly	Ala	Glu	Ser	Leu	Ala	Ala	Gln	Arg	Glu	
				695					700					705	
Val	His	Pro	Lys	Gln	Pro	Glu	Pro	Ser	Ala	Thr	Pro	Gln	Leu	Pro	
				710					715					720	
Gly	Ser	Ser	Pro	Pro	Pro	Ala	Asn	Val	Ser	Ala	Thr	Leu	Val	Ser	
				725					730					735	
Glu	Arg	Asn	Lys	Glu	Asn	Arg	Thr	Asp							
				740											

&lt;210&gt; 9

&lt;211&gt; 2015

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 011886CB1

&lt;400&gt; 9

```

agacgttggt gcttgggcgc ttctccgctg cgtgtaggtg aagggggctt cctgaccgag 60
acatggattt aggtgctatt acaaaatact cagcattaca cgccaagccc aatggactga 120
tccttcaata cgggactgct ggatttcgaa cgaaggcaga acatcttgat catgtcatgt 180

```

ttcgc	catggg	attattagct	gtcctgaggt	caaaacagac	aaaatccact	ataggagtca	240
tggt	aaacagc	gtcccacaat	cctgaggaag	acaatggtgt	aaaattgggt	gatccttttg	300
gtg	aaatggt	ggcaccatcc	tgggaggaac	atgccacctg	tttagcaa	at	360
aag	atatgca	gagagtgtt	attgacatca	gcgagaaaga	agctgtgaat	ctgcaacaag	420
atgc	ctttgt	agttattggt	agagatacca	ggcccagcag	tgagaaactt	tcacaatctg	480
taata	gatgg	tgtgactgtt	ctaggagggtc	aattccatga	ttatggcttg	ttaacaacac	540
cccag	ctgca	ctacatgggtg	tattgtcgaa	acacgggtgg	ccgatatgga	aaggcaacta	600
taga	agggtta	ctaccagaaa	ctctctaagg	cttttgtgga	actcaccaaa	caggcttctt	660
gcagt	ggaga	tgaatacaga	tcacttaagg	ttgactgtgc	aaatggcata	ggggccctga	720
agct	taaggga	aatggaacac	tacttctcac	agggcctgtc	agttcagctg	tttaatgatg	780
ggt	ccaagg	caaactcaat	catttatgtg	gagctgactt	tgtgaaaagt	catcagaaac	840
ctcc	acagg	aatggaaatt	aagtccaatg	aaagatgctg	ttcttttgat	ggagatgcag	900
acaga	attgt	ttattactac	catgatgcag	atggccactt	tcattctcata	gatggagaca	960
agata	gcaac	gttaattagc	agtttcctta	aagagctcct	ggtggagatt	ggagaaagt	1020
tgaat	tattg	tgttgtaaca	actgcatatg	caaatggaag	ttcaacacgg	tatcttgaag	1080
aagt	tatgaa	ggtacctgtc	tattgcacta	agactggtgt	aaaacatttg	caccacaagg	1140
ctca	agagtt	tgacattgga	gtttattttg	aagcaaatgg	gcatggcact	gcactgttta	1200
gtac	agctgt	tgaaatgaag	ataaaacaat	cagcagaaca	actggaagat	aagaaaagaa	1260
aagct	gctaa	gatgcttgaa	aacattattg	acttgtttaa	ccaggcagct	ggtgatgcta	1320
tttct	gacat	gctgggtgatt	gaagcaatct	tggctctgaa	gggcttgact	gtacaacagt	1380
gggat	gctct	ctatacagat	cttccaaaca	gacaacttaa	agttcagggt	gcagacagga	1440
gagtt	attag	cactaccgat	gctgaaagac	aagcagttac	accccagga	ttacaggagg	1500
caat	caatga	cctgggtgaag	aagtacaagc	tttctcgagc	ttttgtccgg	ccctctggta	1560
caga	agatgt	cgtccgagta	tatgcagaag	cagactcaca	agaaagtgca	gatcaccttg	1620
cacat	gaagt	gagcttgga	gtatttcagc	tggctggagg	aattggagaa	aggccccaac	1680
cagg	tttctg	aagataat	tcattatcct	gagaaactgg	actttttaca	agtctttaca	1740
aaact	gtcaa	taataatggc	agtactaaga	gatttataat	cataatgttt	acaatgcagc	1800
ctact	ggatt	gtctctagat	ctgttttctt	ttaacactaa	cagaataatt	ctttataaa	1860
agg	taagcct	tacacttggt	aaagaaat	acctctaatt	tcagtctcac	taatgtaaaa	1920
tact	gggact	taagtataca	attcagtcac	taactgtaca	gttttatgtg	gggaacaatt	1980
catg	caggct	actggaaaat	taaatcttat	tacca			2015

&lt;210&gt; 10

&lt;211&gt; 1823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1863189CB1

&lt;400&gt; 10

cggct	cgagc	cggagcgagg	cgctcgggatg	cagcgccccg	ggcccttcag	caccctctac	60
gggc	gggtct	tggccccgct	gccccgggag	gcccggggcg	cggcctccgg	cggaggagg	120
aacag	ctggg	acctcccggg	ttcccacgtg	cgctgtccgg	ggcgtgcaca	gtctgggacc	180
cg	tgccgggtg	ctggcaacac	aagcaccagc	tgcggggact	ccaacagcat	ctgcccggcc	240
ccct	ccacga	tgtccaaggc	cgaggaggcc	aagaagctgg	cgggcccgcg	ggctgtggag	300
aacc	cagtga	ggaataacca	agtgtctggga	attggaagt	gttctacaat	tgtccatgct	360
gtgc	agcgaa	tagctgaaag	ggtgaagcaa	gagaatctga	acctcgtctg	tattccact	420
tcct	tcagg	cccgccagct	catcctgcag	tatggcttga	ccctcagtga	tctggatcga	480
caccc	agaga	tcgaccttgc	catcgatggt	gctgatgaag	tagatgctga	tctcaatctc	540
atca	agggtg	gcggaggctg	cctgacctcag	gagaagattg	tggctggcta	tgctagtctc	600
ttcat	ctgta	tcgctgattt	caggaaagat	tcgaagaatc	tcggggatca	gtggcacaag	660
ggaat	cccca	tcgaggtcat	cccaatggcc	tatgtcccag	tgagccgagc	tgtgagccag	720
aag	tttgggg	gcgtgggttga	acttcgaatg	gctgtcaaca	aggctgggtcc	tgtgggtgaca	780
gata	atggga	attttatctt	ggactggaag	tttgaccggg	tacacaaatg	gagtgaagt	840
aata	cagcta	tcaaaaatga	cccagggtgtg	gtggacacag	gcctattcat	caacatggct	900
gag	agagctct	actttgggat	gcaggatggc	tcagtgaaaca	tgagggagaa	gcctttctgt	960
tgac	cctgca	aggagcagag	tgtgttcacc	ttgagtctcc	agcccacagc	caaggtggac	1020
gtac	ctctcc	aggagccttt	gccttaatgt	atctctgcct	ggacaacttg	tgggtggggg	1080
tggg	ggggaag	agtgggagg	ggagttaaat	ccagtcttat	gaagtattgt	tattaaatgt	1140
cttt	tttaaaa	agagaaatat	aaacatatat	ttttactatt	aaaatattca	gtttttttaa	1200

```

tgaagtagaa cttgagttca tgttttatat gaaatattta ccaaaaaaaaa aaaatgaggt 1260
aaactgtatt taaaaccttt gacttgagtc tgctggtaaa gcttctgaat attgagtttg 1320
ctgagaaata aaaatcaaaa cttctttaag ctggtaaagt gaggggcca ccagcagtga 1380
tctcctgatg ccttactgga aactttgttt acttgctgc taccctctga ttgttttta 1440
gttagttttt attgtgagca cacatagtac ctagttacat ctttaagatca ggtttataaa 1500
actgtggagt ggagcggat ggtatggaat gacttggaat gtaagctgtc agggagaaaa 1560
tgttgttaca cttttgctaa gatctggggg tttcttcata ttctgctgt tggaagcagt 1620
tgaccagaaa tgcttgccag tactgccaaa gcactgctgt gaaatgtgaa gtactttgtt 1680
tttttatatt taatgatttt ctttttgta ttaatatatt tctctgttcc ttgtttatta 1740
cttgcatggt ttggcgtcag aagtccttac ctctttatat tgtttgcagg tttaaataaa 1800
acagtgtggt gccaaaaaaaa aaa                                     1823

```

&lt;210&gt; 11

&lt;211&gt; 1526

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2088868CB1

&lt;400&gt; 11

```

gcaggagcag gagagggaca atggaagctg ccccgccag gttcatgttc ctcttatttc 60
tcctcacgtg tgagctggct gcagaagttg ctgcagaagt tgagaaatcc tcagatggtc 120
ctgggtgctgc ccaggaaccc acgtggctca cagatgtccc agctgccatg gaattcattg 180
ctgccactga ggtggctgtc ataggcttct tccaggattt agaaatacca gcagtgccca 240
tactccatag catgggtgcaa aaattcccag gcgtgtcatt tgggatcagc actgattctg 300
aggttctgac aactacaac atcactggga acaccatctg cctctttcgc ctggtagaca 360
atgaacaact gaatttagag gacgaagaca ttgaaagcat tgatgccacc aaattgagcc 420
gtttcattga gatcaacagc ctccacatgg tgacagagta caaccctgtg actgtgattg 480
ggttattcaa cagcgtaat cagattcatc tcctcctgat aatgaacaag gcctccccag 540
agtatgaaga gaacatgcac agataccaga aggcagccaa gctcttccag gggaagattc 600
tctttattct ggtggacagt ggtatgaaag aaaatgggaa ggtgatata tttttcaaac 660
taaaggagtc tcaactgcc a gctttggcaa ttaccagac tctagatgac gagtgggata 720
cactgcccac agcagaagtt tccgtagagc atgtgcaaaa cttttgtgat ggattcctaa 780
gtggaaaatt gttgaaagaa aatcgtgaat cagaaggaaa gactccaaag gtggaactct 840
gacttctcct tggaactaca tatggccaag tatctacttt atgcaaagta aaaaggcaca 900
actcaaactc cagagacact aaacaacagg atcactaggc ctgccaacca cacacacag 960
cacgtgcaca cagcagcga cgcggtgcac cacacacgcy cacacacaca cacacacaca 1020
cagagcttca tttcctgtct taaaatctcg ttttctcttc ttcttcttt taaatttcat 1080
atcctcactc cctatccaat ttctttctta tcgtgcattc atactctgta agcccatctg 1140
taacacacct agatcaaggc tttaagagac tcaactgtgt gcctctatga aagagaggca 1200
ttcctagaga aagattgttc caattttgtca tttaatatca agttttgtata ctgcacatga 1260
cttacacaga acatagtccc tgctctttta aggttaccta agggttgaaa ctctaccttc 1320
tttcataagc acatgtccgt ctctgactca ggtacaaaaa ccaaaggatg gttttaaaca 1380
cctttgtgaa attgtctttt tgccagaagt taaaggctgt ctccaagtcc ctgaactcag 1440
cagaaataga ccatgtgaaa actccatgct tggtagcat ctccaactcc ctatgtaaat 1500
caacaacctg cataataaat aacaga                                     1526

```

&lt;210&gt; 12

&lt;211&gt; 1205

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2481256CB1

&lt;400&gt; 12

```

gcggtatggc gtggggctgc aagattggcc cgtccatcct caacagcgac ctggccaatt 60
tagggggccga gtgcctccgg atgctagact ctggggccga ttatctgcac ctggacgtaa 120

```

```

tggacgggca ttttgttccc aacatcacct ttggtcaccc tgtggtagaa agccttcgaa 180
agcagctagg ccaggaccct ttctttgaca tgcacatgat ggtgtccaag ccagaacagt 240
gggtaaagcc aatggctgta gcaggagcca atcagtacac ctttcatctc gaggetactg 300
agaaccagg ggctttgatt aaagacattc gggagaatgg gatgaagggt ggccttgcca 360
tcaaaccagg aacctcagtt gagtatattg caccatgggc taatcagata gatatggcct 420
tggttatgac agtggaaaccg gggtttgag ggcagaaatt catggaagat atgatgcaa 480
aggttcactg gttgaggacc cagttcccat ctttggatat agaggtcgat ggtggagtag 540
gtcctgacac tgtccataaa tgtgcagagg caggagctaa catgattgtg tctggcagtg 600
ctattatgag gagtgaagac cccagatctg tgatcaatct attaagaaat gtttgctcag 660
aagctgctca gaaacgttct cttgatcggg gaaaccataa ggagcccagt gttcctgttc 720
atgaaatctc ccttttactg gaaaacagga atattgacta ccaaatacaca atgcaattga 780
agccgtactg cttttttgag cagttattca ttccagtgat taaaactgat tgtgcagaat 840
attctaagag gtcagaaatt ggtgtgtata actacatttt tagtgatgca atttattgat 900
tagtgagtaa gatactgttt ttattgagag atttgatttt tataaagtaa aaatacggct 960
gcattagggg tacaacacaga aaagtgtctt aatgtctaag gagggcatat tagctacact 1020
acaaaaacaa attttgtctg tactttctgaa aagaattttg ttgtttctca gctgttttcc 1080
aaaagcaaaag gaagtcctta tggttttttt ctatttcag ttattgtgat ttgtttataa 1140
gtttgggtgg ggtgcatacc atattcttgg ttcttaaaat ctatcacttt tcaccttata 1200
cttga 1205

```

&lt;210&gt; 13

&lt;211&gt; 4796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2505257CB1

&lt;400&gt; 13

```

gccccggctc gccgtggaga cccggcgcgtg aggcacctac cgggtaccggc cgcgcgctgg 60
tagtcgccgg tgtggctgca cctcaccaat cccgtgcgcc ggggtgggc cgtcggagag 120
tgcggtgtgt tctctcctgc acgcgggtgct tgggctcggc caggcggggg cgcgcgccag 180
ggtttgagga tgggggagta gctacaggaa gcgacccgc gatggcaagg tatatttttg 240
tggaatgaaa aggaagtatt agaaatgagc tgaagaccat tcacagatta atatttttgg 300
ggacagattt gtgatgcttg attcaccctt gaagtaatgt agacagaagt tctcaaattt 360
gcatattaca tcaactggaa ccagcagtgat atcttaatgt tcaactaaat cagaacttgc 420
ataagagaga gaatgggagt ctggttaaat aaagatgacg atatcagaga cttgaaaagg 480
atcattctct gttttctgat agtgtatatg gccattttag tgggcacaga tcaggatttt 540
tacagtttac ttggagtgtc caaaaactgca agcagtagag aaataagaca agctttcaag 600
aaattggcat tgaagttaaa tcttgataaa aaccggaata acccaaatgc acatggcaat 660
tttttaaaaa taaatagagc atatgaagta ctcaaagatg aagatctacg gaaaaagtat 720
gacaaatatg gagaaaaggg acttgaggat aatcaagggt gccagtatga aagctggaac 780
tattatcggt atgatttttg tatttatgat gatgatcctg aaatcataac attggaagaa 840
agagaatttg atgctgctgt taattctgga gaactgtggt ttgtaaattt ttactcccca 900
ggctgtttac actgccatga tttagctccc acatggagag actttgctaa agaagtggat 960
gggttacttc gaattggagc tggttaactgt ggtgatgata gaatgctttg ccgaatgaaa 1020
ggagtcaaca gctatcccag tctcttcatt ttccggctcg gaatggcccc agtgaaatat 1080
catggagaca gatcaaagga gagtttagtg agttttgcaa tgcagcatgt tagaagtaca 1140
gtgacagaac tttggacagg aaattttgtc aactccatac aaactgcttt tgctgctggt 1200
attggctggc tgatcacttt ttgttcaaaa ggaggagatt gtttgacttc acagacacga 1260
ctcaggctta tgggcatggt ggatgggtctt gttaatgtag gatggatgga ctgtgccacc 1320
caggataacc tttgtaaaag cttagatatt acaacaagta ctactgctta ttttctcctt 1380
ggagccactt taaataacaa agagaaaaac agtattttgt ttctcaactc attggatgct 1440
aaagaaatat atttggaagt aatacataat cttccagatt ttgaactact ttcggcaaac 1500
acactagagg atcgtttggc tcatcatcgg tgggtgttat tttttcattt tggaaaaaat 1560
gaaatttcaa atgatcctga gctgaaaaaa ctaaaaactc tacttaaaaa tgatcatatt 1620
caagttggca ggtttgactg ttcctctgca ccagacatct gtagtaatct gtatgttttt 1680
cagccgtctc tagcagtatt taaaggacaa ggaaccaaaag aatatgaaat tcatcatgga 1740
aagaagattc tatatgatat acttgccctt gccaaagaaa gtgtgaattc tcatgttacc 1800
acgcttgga ctcaaaattt tcctgccaat gacaaagaac catggcttgt tgatttcttt 1860
gccccctggt gtccaccatg tcgagcttta ctaccagagt tacgaagagc atcaaattct 1920

```

```

ctttatgggc agcttaagtt tggtagacta gattgtacag ttcattgaggg actctgtaac 1980
atgtataaca ttcaggctta tccaacaaca gtgggtattca accagtccaa cattcatgag 2040
tatgaaggac atcactctgc tgaacaaatc ttggagttca tagaggatct tatgaatcct 2100
tcagtgggtc cctttacacc caccaccttc aacgaactag ttacacaaag aaaacacaa 2160
gaagtctgga tgggtgattt ctattctccg tgggtgcatc cttgccaagt cttaatgcc 2220
gaatggaaaa gaatggcccc gacattaact ggactgatca acgtgggcag tatagattgc 2280
caacagtatc attctttttg tgcccaggaa aacgttcaaa gataccctga gataagattt 2340
tttcccccaa aatcaaataa agcttatcag tatcacagtt acaatgggtg gaatagggat 2400
gcttattccc tgagaactcg ggggtctagga tttttacctc aagtatccac agatctaaca 2460
cctcagactt tcagtgaata agttctacaa gggaaaaatc attgggtgat tgatttctat 2520
gctccttggg gtggaccttg ccagaatttt gctccagaat ttgagctctt ggctaggatg 2580
attaaaggaa agtgaaagc tggaaaagta gactgtcagg cttatgctca gacatgccag 2640
aaagctggga tcagggccta tccaactgtt aagttttatt tctacgaaag agcaaagaga 2700
aattttcaag aagagcagat aaataccaga gatgcaaaag caatcgctgc cttataaagt 2760
gaaaaattgg aaactctccg aaatcaaggc aagaggaata aggatgaact ttgataatgt 2820
tgaagatgaa gaaaaagttt aaaagaaatt ctgacagatg acatcagaag acacctattt 2880
agaatgttac atttatgatg ggaatgaatg aacattatct tagacttgca gttgtactgc 2940
cagaattatc tacagcactg gtgtaaaaga aggggtctgca aactttttct gtaaagggcc 3000
ggtttataaa tatttttagac tttgcaggct ataatatatg gttcacacat gagaacaaga 3060
atagagtcac catgtattct ttgttatttg cttttaacaa cttttaaaaa atattaaaac 3120
gattcttagc tcagagccat acaaaagtag gctggattca gtccatggac catagattgc 3180
tgtccccctc gacggactta taatgtttca ggtggctggc ttgaacatga gtctgctgtg 3240
ctatctacac aaatgtctaa gttgtataaa gtccactttc ccttcacgtt ttttggtgta 3300
cctgaaaaga ggtaacttag tttttgggtc cttgttctcc taaaaatgct atccctaacc 3360
atatatttat atttcgtttt aaaaacaccc atgatgtggc acagtaacaa aacctgttta 3420
tgctgtatta ttatgaggag attcttcatt gttttctttc cttctcaaag gttgaaaaaa 3480
tgcttttaat ttttcacagc cgagaaacag tgcagcagta tatgtgcaca cagtaagtac 3540
acaaatttga gcaacagtaa gtgcacaaat gctgtatcat ccaggaaaaac 3600
ctgagggaaa aaaattatag caattaactg ggcattgtag agtatcctaa atatgttatc 3660
aagtatttag agttctatat tttaaagata tatgtgttca tgtattttct gaaattgctt 3720
tcatagaaat tttccactg atagttgatt tttgaggcat ctaatattta catatttgcc 3780
ttctgaactt tgttttgacc tgtatccttt atttacattg ggtttttctt tcgtagtttt 3840
ggtttttcac tcctgtccag tctattttatt attcaaatag gaaaaattac tttacagggt 3900
gtttttactg agcttataat gatactgtag ttattccagt tactagttta ctgtcagagg 3960
gctgcctttt tcagataaat attgacataa taactgaagt tattttttata agaaaatcaa 4020
gtatataaat ctaggaaagg gatcttctag tttctgtgtt gtttagactc aaagaatcac 4080
aaatttgtca gtaacatgta gttgttttag tataattcag agtgtagaca atggtaaaaa 4140
ttccaatcag tcaaaagagg tcaatgaatt aaaaggcttg caactttttt caaaaacctg 4200
ttagaataat ctttattgtg ttttgaggag ttttcttttt tttcttttca atatcacttt 4260
atcctccagt atttctcat aagggttatt atagccataa ttaatgttaa aatagacttt 4320
gttcttcata tttctccatc tttttcgcta ctatatactc tgtctggatt ctgctgtatg 4380
cctgttggca tatatggaac agtcaccact tgtcacactt aacaccagct ttttgaaata 4440
tgatcagtaa tggcaagagc ctttcattct cgaatgttta aagcctagga gttctacaaa 4500
attggcttct ttttacaaga atcccaaaat ggaatgccta aagaagtctt acttgggtaa 4560
atacttacta aaataactg gttatgtgca tatcaccaca ctggacactg aggatgttc 4620
aaaaggaatc taagacatgg tccccactt ccaactgtct gtaattcact gttttgtcat 4680
tgagctcata aggtacttac attactacct ataaatgttt cctgtacttg ttagttgttg 4740
agaaacattt taggcagtaa ataaaatagt aaatattatg tgtcctataa tttgac 4796

```

<210> 14

<211> 1680

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Incyte ID No: 3325534CB1

<400> 14

```

acacccccct cctccggggg tttgtagcgg aggaggagcg ggcgccatgg cggttctact 60
ggagaccact ttaggcgacg tcgtcatcga cttgtacacc gaagaacggc cgcggtgctg 120
cttgaatttc ttgaaactgt gcaaaaataa atattacaat tattgcctta ttcacaatgt 180

```

```

acagagggat tttatcatatc aaactggcga tcctacaggg actggccgtg gaggagagtc 240
tatctttggc caactgtatg gtgatcaagc aagctttttt gaggcagaaa aagtcccaag 300
aattaagcac aagaagaaag gcacagtgtc catgggtgaat aatggcagtg atcaacatgg 360
atctcagttt cttatcacca caggagaaaa tctagattat cttgatgggtg tccatacggg 420
gtttggtgag gtgacagaag gcatggacat aattaagaaa attaatgaga cttttgttga 480
caaggacttt gtaccatatac aggatatcag gataaatcat acggtgattt tagatgatcc 540
atttgatgac cctcctgatt tattaatccc tgatcgatca ccagaacctt caagggaaca 600
attagatagt ggtcgaatag gagcagatga agaaattgat gattttcaaag gaagatcagc 660
tgaggaagta gaagaaataa aggcagaaaa agaggctaaa actcaggcta tactttttgga 720
gatgggtggga gacctacctg atgcagatat taaacctcca gaaaatgtac tgtttgtgtg 780
taaattgaac ccagtgaaca cagatgagga tctggaaata atatttctta gatttgggcc 840
aataagaagt tgtgaagtta tccgagactg gaagacagga gagtccctct gttacgcttt 900
tattgaattt gaaaaggaag aagatttgtg gaaagcattc ttcaaaatgg acaatgtgct 960
tatagatgac agaagaatac atgtggattt tagccagtcg gttgcaaagg ttaaatggaa 1020
aggaaaaggt gggaaataca ccaagagtga tttcaaggag tatgaaaaag aacaggataa 1080
accacctaat ttggttctga aagataaagt aaagccaaa caggatacaa aatacgatct 1140
tatattagat gagcaggccg aagactcaaa atcaagtcac tcacacacaa gtaaaaaaca 1200
caagaagaaa acccatcact gttctgaaga gaaagaagat gaggactaca tgccaatcaa 1260
aaataactaat caggatatct atagagaaat ggggtttggt cactatgaag aagaagaaaag 1320
ctgttgggag aaacaaaaga gtgaaaagag agaccgaact cagaaccgaa gtcgtagccg 1380
atctcgagag agggatggcc attatagtaa tagtcataaa tcaaaatacc aaacagatct 1440
ttatgaagaa gaaagagta aaaagagaga ccgaagcaga agtccaaaga agtccaaaga 1500
taaagaaaaa tctaagtata gatgaaagat gaagaggcag aattgagagg ctaacatatt 1560
tactcttgct taacttaaga gtgccaggaa agcagatgct tagattttgt gtcaaagctt 1620
gttatttttt tcatactagg attatggtct ttagattaat actgattata tagagcacgc 1680

```

<210> 15  
 <211> 1403  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <223> Incyte ID No: 3817050CB1

```

<400> 15
cctgtgcact gttggtggga atataaaatg atgcagctgg ctttgcagac actgctgtcc 60
cccaacaccc cctgtcacta ggccatgggtc atcccagactg tgcccttcaa catcaccatc 120
aacagcaagc ccttaggaca catctccttt cagctatttg cagacaaatt tccaagaca 180
ggagaaaact ttcacactct gaacaataaa gacaaaggat ttggttcctg ctttcacaga 240
attattccgg agtttatatg ccagggtgat gacttcacac ccataatgg cattggtggc 300
aagtcacatc acggggataa atttgatgat aagaacttta ttgtgaagca tacaggctct 360
ggcatcttgt ccatggcaaa tgctgcaccc aaaacaaatg agtcccagtt tttcatctgc 420
actgccatgg ccaaattggtg ggatggcaag catgtgatct ttggcagggt gaaagagggc 480
atgaatattg tggagccat ggaatgcttt ggggtcagga atggcaagac aagcaagatc 540
gccattgcca actgcagaca actctgataa atttgacttg tgttttatct taaccaccag 600
acctttcctt ttgtagctca ggagagcacc gttccacccc attcgctcac aatatacctat 660
aatatttggt ctctcactgc agttctttga gttctatatt ttcattatgt cctccacgt 720
atagctggat tgcagagtta agtttatgat tatgaaataa aaactaacia aaaaaaatga 780
tgcagccact atggaaaaca gtatcacagt ttctcaaata attaaacatt gaattactat 840
atgattcagc agttccactc ctggatatat atccaaaaga attgaaagca gaattccaaa 900
gaaatatttg cacatccatg ttcatagcta taccattcac agtagccaag aggtggaagc 960
catctgtgtg cccatccaca gatgaatgga taaacaaaat atgggatata cacactatga 1020
atacagcctt aaaaaggaag gaaattccaa cacatgctac aacatggagg aatcttgagg 1080
aattaacggg aagtgaataa agccagtcac aaaaaggcca atactgaatg attccactta 1140
tgtgaggtag ctagagtagt catattcata gagacagaaa atagaatgat tgttgccagc 1200
aactgggagg aagggggtgt gaaaagtgtg ttaattgata ttgagtttgt tttccagac 1260
gaagaagttc tgaagggttg ttacatgatg tgaatatact aaacactact gaactgtgta 1320
cttagaatgg ttaagataaa ttttatgcgt tttcactaca ataacaagta gaacagtaga 1380
acagatgatt agtcacagca gaa

```

<210> 16  
<211> 2665  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Incyte ID No: 5324378CB1

<400> 16

ccgtggcgct	cggtgcgcg	ctgctcctcg	ccctcaagtt	cacctgcagt	cgagcaaaag	60
atgtgataat	accagcaaag	ccacctgtca	gctttttctc	cttgaggctc	ccagtccttg	120
acctcttcca	ggggcagctg	gattatgcag	agtacgttcg	acgggattca	gaggtggtac	180
tgtctctctt	ctatgcccc	tgggtgtggac	agtccatcgc	tgccagggca	gaaattgagc	240
aagcagcaag	tcggctttca	gatcagggtg	tgtttgtggc	aattaactgt	tgggtggaacc	300
aggggaaatg	cagaaaaacag	aaacacttct	tttattttcc	tgtaatatat	ctgtatcatc	360
ggagccttga	gtactcgggt	actttgagtt	cagtggctca	ccccagcctc	ctggttattt	420
gaccttcttc	acctcagcat	tacattcatt	aaagaaagat	tacctaggaa	cagtacgatt	480
tggggttatc	acaaataaac	atcttgcgaa	actggtatcc	ttagtacact	ctggaagtgt	540
gtattttacat	agacattttca	acacatcact	tgtcttcccc	agggagggtcc	tgaactacac	600
agctgagaac	atctgtaagt	gggccttaga	aaaccaggag	acgctctttc	ggtggctgcg	660
gccacacgga	ggcaagagtc	tcctgctgaa	taacgagctg	aagaaaggac	cagcgtgtgt	720
tctgttcata	ccttttaatc	ccctggccga	aagtcatcct	ttaatagacg	agatcaccca	780
agtggccttg	gagtacaaca	actgtcatgg	ggaccagggtg	gtggagcgtc	tccttcagca	840
cctgcggcgg	gtggatgctc	cagtgtctgga	gtccctggcc	ctggaagtgc	cggcacagct	900
gccagaccgg	ccaacgatca	cagcgtcccc	ctgctgcaac	actgtggtgc	tgccccagtg	960
gcactccttc	tccaggaccc	acaacgtctg	tgaactctgt	gtcaaccaga	cctccggggg	1020
catgaagccg	agctcgggtc	gcgtgccaca	gtgcagcttt	tttgaaatgg	cagcagctct	1080
ggattctttc	tacctcaagg	agcagacctt	ttatcatgtg	gcatacagaca	gcataagatg	1140
cagcaatttt	ttaacttctc	atagccccct	cagctactac	actgcatggt	gcaggaccat	1200
aagcaggggt	gtgtcaggct	tcacgcactc	tgaacaaggt	gtctttgaag	cccctactgt	1260
tgcattttct	tcccttgaga	agaaatgtga	ggttgatgcc	ccaagctccg	ttcctcatat	1320
tgaggagaa	aggtatctct	ttccagaagt	ggacatgact	agcacaaact	tcacaggcct	1380
gagctgcaga	accaacaaga	ctctcaacat	ctaccttttg	gattcaaatt	tgttttggtt	1440
atatgcagag	agactgggtg	ctccgagctc	cactcagggtg	aaagaatttg	cggcaatttg	1500
tgacgtgaaa	gaagaatctc	attacatctt	ggatccaaag	caagcactga	tgaagctcac	1560
cctagagtct	tttattcaaa	acttcagcgt	tctctatagt	cccttgaaaa	ggcatctcat	1620
tgggaagtgg	tctgcccagt	tcccgtctca	gcatttaatc	actgaagtga	caactgatac	1680
cttttgggaa	gtagtccctc	aaaaacagga	cgttctcctg	ctctattacg	ctccgtgggtg	1740
cggcttctgt	ccatccctca	atcacatctt	catccagcta	gctcggaacc	tgcccatgga	1800
cacattcact	gtggcaagga	ttgacgtgtc	tcagaatgac	cttccttggg	aatttatggt	1860
cgatcgtctt	cctactgtct	tgttttttcc	ctgcaacaga	aaggacctaa	gtgtgaaata	1920
ccccgaagac	gtccccatca	cccttccaaa	cctgttgagg	ttcattttgc	atcactcaga	1980
ccctgcttcc	agcccccaga	atgtggctaa	ctctcctacc	aaggagtgtc	ttcagagcga	2040
ggcagtctta	cagcgggggc	acatctccca	cttgagagaga	gagatccaga	aactgagagc	2100
agaaataagc	agcctccagc	gagcacaagt	gcagggtggag	tcccagctct	ccagtgcccg	2160
cagagatgag	caccgggtgc	ggcagcagca	gcggggccctg	gaagagcagc	acagcctgtg	2220
ccacgcacac	agtgcagcagc	tgcaggccct	ctatgagcag	aagacacgtg	agctgcagga	2280
gctggcccg	aagctgcagg	agctggccga	tgcctcagaa	aacctcctta	ccgagaacac	2340
gtggctcaag	atcctgggtg	cgacatgga	gaggaaactg	gagggcaggg	atggagctga	2400
aagcctggcg	gcccagagag	aggtccaccc	caagcagcct	gagccctcag	ccacccccca	2460
gtccctggc	agctccctc	cacctgccaa	tgtcagcgcc	acactggtgt	ctgaaaggaa	2520
taaggagaac	aggacagact	aactttttta	atgatatgaa	gaaatcagag	gtgaaaattg	2580
tacattggga	atatatttat	gcaaatttta	ttgaaattta	ttgaaataa	agattttctc	2640
agtgggtctag	aaaaaaaaa	aaaaa				2665